

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

SERIAL NUMBER: 10/670,765

CONFIRMATION NUMBER: 2783

Boston, Massachusetts

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Commissioner for Patents  
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Alexandria, VA 22313-1450

**Pre-Appeal Brief Request for Review**

This paper is in response to the Office Action, which was designated as “final,” of April 13, 2006, in the above-identified patent application. A petition for a one-month extension of time is filed herewith. With the extension, these documents are due on August 13, 2006. Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the following reasons.

**Omission of Elements from Claims 1 and 8 in the Cited Art:**

All of the pending claims were rejected under 35 U.S.C. §103(a) as being obvious in view U.S. Patent 5,672,210 (Moto *et al.*) in combination with other references. Among the pending claims, two (*i.e.*, claims 1 and 8) are independent. Each of the other claims depends from claim 1 and, therefore, incorporates its limitations.

**Claim 1:**

Claim 1 specifies, *inter alia*, carrying out the following steps **in repeating, alternating sequence**: (d) scanning a pulsed laser beam across a target with the rotational position of the target fixed and (e) rotating the target by an incremental angle (as discussed in the Amendment and Response filed on January 13, 2006, at page 6, third paragraph). Performing these steps in sequence (wherein the pulsed-laser-beam scan is performed on a rotationally fixed target) will provide a very different scan pattern on the surface of the target than will the scan performed on

a rotating target. For example, production of the illustrated scan pattern of FIG. 8 is facilitated by scanning a fixed target, then rotating the target after scanning, and repeating.

The rejections made under §103 are clearly in error because none of the cited references disclose or suggest carrying out these steps in repeating, alternating sequence (rather than simultaneously). This omission from the cited art is further discussed in the above-cited Amendment at pages 6-8.

At page 5 of the Office Action, dated April 13, 2006 (in the “Response to Arguments” section), the Examiner responded as follows:

Applicant argues that Moto *et al.* does not teach directing the laser across the target and then rotating. The examiner respectfully disagrees because a target in the chamber *may* be rotated and scanned with respect to the laser.

(Emphasis added). The fact that these steps “may” be carried out as claimed is, of course, of no relevance (*i.e.*, it would be inappropriate for Applicant to seek to patent a method that was impossible to perform). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). However, the Examiner has never cited any teaching or suggestion in the prior art for performing these steps in repeating alternating, sequence. Absent such a showing of these elements from claim 1, Applicant respectfully submits that this rejection against claims 1-6 is legally deficient.

**Claim 8:**

Claim 8 is directed to an apparatus for pulsed-laser deposition including a computer-readable medium storing software code. Consistent with the method of claim 1, that software code “generates sequential commands for: (a) the motor coupled with the platform to rotate by an angular increment and stop; and (b) the means for displacing the rotatable platform and/or the pulsed laser beam to execute the x/y scan pattern while the rotation of the platform is stopped.

None of the cited art discloses or suggests a process for (1) rotating the platform, (2) stopping the rotation, and (3) executing the x/y scan pattern while the rotation is stopped. Likewise, none of the cited art discloses or suggests software for carrying out this process. Absent a disclosure or suggestion of this element in claim 8, Applicant respectfully submits that this obviousness rejection against claim 8 is legally deficient.

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### **CONCLUSION**

On the basis of the foregoing, Applicant respectfully submits that the clear absence of any disclosure or suggestion in the prior art of the above-identified elements from claims 1 and 8 proves a legal deficiency in the pending obviousness rejections. Accordingly, Applicant respectfully requests that the rejections under 35 U.S.C. § 103 be withdrawn.

Respectfully submitted,

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